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**Matthew Moore\*** ([matthew.moore@ku.edu](mailto:matthew.moore@ku.edu)) and **Andrew Moorhead**. *Supernilpotence Need Not Imply Nilpotence*.

Supernilpotence is a generalization of nilpotence using a recently developed theory of higher-arity commutators for universal algebras. Many important structural properties have been shown to be associated with supernilpotence, and the exact relationship between nilpotence and supernilpotence has been the subject of investigation. We construct an algebra which is not solvable (and hence not nilpotent) but which is supernilpotent, thereby showing that in general supernilpotence does not imply nilpotence. (Received September 17, 2019)